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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/789,928

02/27/2004

Tobin J. Marks

7479

6801

22922

7590

12/12/2006

REINHART BOERNER VAN DEUREN S.C.  
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EXAMINER

KUGEL, TIMOTHY J

ART UNIT

PAPER NUMBER

1712

DATE MAILED: 12/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/789,928	Applicant(s) MARKS ET AL.	
	Examiner Timothy J. Kugel	Art Unit 1712	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 19 October 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 19-22 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-6, 8-14 and 16-18 is/are allowed.
- 6) ☒ Claim(s) 7 and 15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-22 are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02/27/2004, 04/03/2006 and 10/19/2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. Claims 1-22 are pending as amended on 19 October 2006. Claims 19-22 are withdrawn from consideration.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Election/Restrictions***

3. This application contains claims 19-22 drawn to an invention nonelected in the reply filed 15 July 2005. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

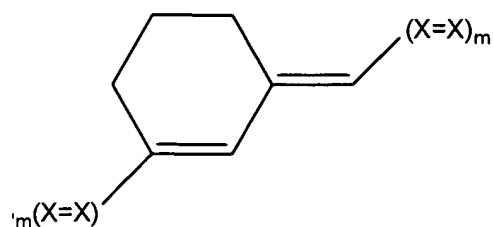
### ***Drawings***

4. The replacement sheet containing figures 10A, 12 and 13 were received on 19 October 2006. These drawings are acceptable.

### ***Claim Rejections - 35 USC § 112***

5. Claims 7 and 15 stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Each of claims 7 and 15 recite, the limitation "wherein (-X=X-)<sub>n</sub> comprises a moiety having a structural formula selected from (-C=C-)<sub>n</sub> and



wherein  $m + m' \geq 1$ ." It is unclear what the  $(-X=X-)_m$  and  $(-X=X-)_{m'}$  represent.

### ***Response to Amendment***

6. Applicant's amendment, filed 19 October 2006, with respect to requiring the D moiety to be a hydrogen bond-forming hydrogen donor and the A moiety to be a hydrogen bond-forming hydrogen acceptor has been fully considered and overcomes the following:

The rejection of claims 1-4 under the judicially created doctrine of obviousness type double patenting as being unpatentable over claim 14 of US Patent 6,855,274 (Marks hereinafter) has been withdrawn.

The rejection of claims 1, 2, 7, 12, 15 and 16 under 35 U.S.C. 102(b) as being anticipated by US Patent 3,947,410 (Meyer '410 hereinafter) has been withdrawn.

The rejection of claims 1, 2 and 7 under 35 U.S.C. 102(b) as being anticipated by United Kingdom Patent GB 1398993 (Fleck hereinafter) has been withdrawn.

### ***Response to Arguments***

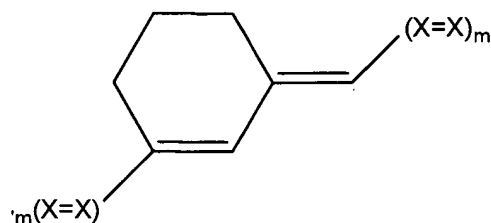
7. Applicant's arguments, filed 19 October 2006, particularly that the specification—specifically Figure 13 and Example 3b—support a substrate that comprises the

condensation product of hydroxylated indium tin oxide and an aminoalkyltrialkoxysilane, have been fully considered and are persuasive.

The rejection of claim 18 under 35 USC 112 1<sup>st</sup> paragraph as not being enabled has been withdrawn

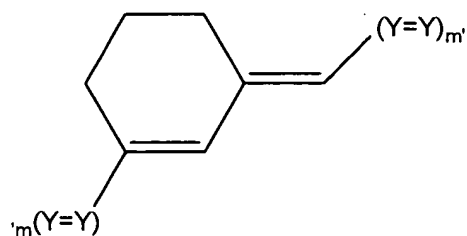
8. Applicant's further arguments filed 19 October 2006 have been fully considered but they are not persuasive.

Applicant argues that one of ordinary skill in the art at the time the invention was made would understand the limitation of claim 18, "wherein  $(-X=X-)_n$  comprises a moiety having a structural formula selected from  $(-C=C-)_n$  and



wherein  $m + m' \geq 1$ "; however, this limitation is

indefinite because  $X=X$  appears as both a variable moiety in the structure  $D-Ar^1_x-$   
 $(X=X)_n-Ar^2_y-A$  and within what should be definite moiety for which  $(-X=X-)_n$  stands. It is suggested that this limitation be amended to read "wherein  $(-X=X-)_n$  comprises a moiety having a structural formula selected from  $(-C=C-)_n$  and



wherein  $m + m' \geq 1$ ", and the various potential Y

substituents are listed.

***Allowable Subject Matter***

9. Claims 1-6, 8-14 and 16-18 are allowed.

***Conclusion***

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J. Kugel whose telephone number is (571) 272-1460. The examiner can normally be reached 6:00 AM – 4:30 PM Monday-Thursday.

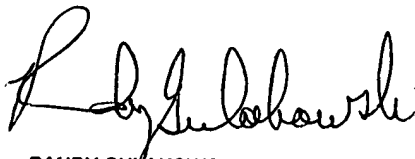
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone

Art Unit: 1712

number for the organization where this application or proceeding is assigned is (571) 273-8300.

12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TJK  
Art Unit 1712



RANDY GULAKOWSKI  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700